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United States
Department of
Agriculture

Agricultural
Marketing
Service

Transportation
and Marketing
Division

March 1993

Federal-State Marketing Improvement Program

7-Year Report, 1985-1991

**United States
Department of
Agriculture**



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Federal-State Marketing Improvement Program

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by

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Assistant Director
Transportation and Marketing Division

March 1993

- A computer model of the upper Mississippi waterway was developed to simulate the affect of a number of efficiencies or improvements in the waterway and fleet operation.
- The Alternative Enterprises Information Center in Missouri has become an outstanding resource for information on almost any kind of agriculturally related alternative enterprise.
- A Michigan program explored the development of plum juice and plum paste as alternative markets for the purple plum.
- A quantitative model was developed in Texas to show the relationship between measurable cotton fiber properties and measurable yarn properties.
- A South Carolina project developed market information to assist in the expansion and diversification of new aquaculture products--primarily hybrid striped bass--from the southeastern United States.

Some of the summaries primarily show objectives, since the work is still in progress. One difficulty in trying to highlight accomplishments is the fact that it often takes a few years for a project to have a notable impact that may not be evident at the time a final report is submitted. For example, a final report indicating the feasibility of catfish production in Mississippi could not have foreseen the growth of that industry to \$704 million in sales in the following decade, or the related interest in aquaculture production that catfish production and marketing has raised. But FSMIP funded the feasibility study.

The use of company names or logos in this report in no way implies endorsement by the U.S. Department of Agriculture.

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MARKETING AND MARKETS

Education

Alabama

Farm Products Marketing Training: 1986 (\$25,000)

Forty meetings and workshops were conducted to help producers upgrade their skills in the areas of harvesting, grading, packaging, marketing, and merchandising. The workshops complemented efforts by the Montgomery State Farmers' Market Demonstration Committee to promote fruit and vegetable marketing at a newly established market. Nineteen publications, including grade guides, bulletins, and recipes, were also developed. As an indication of the project's success, a Fresh Food Expo brought 200 farmers/producers and 8,000 consumers to the market.

To Establish, Operate, and Evaluate a Pilot Program in Consumer Education: 1989 (\$30,000)

With the establishment of the Montgomery Farmers' Market, and efforts to increase production and sales of local produce, there was a need to educate local consumers about the products available and how to select and prepare them. The purpose of the program is to develop a consumer education program.

Colorado

Livestock Marketing Assistance: 1986 (\$25,500)

A workbook, *Marketing Strategies for Beef Cattle Workbook*, with a Lotus template, was developed to teach cattle producers how to determine their costs of production and evaluate marketing alternatives. Workshops were held around the State to support the workbook and assist producers with developing their marketing decisions.

Illinois

Development of a Handbook To Assist Farm Families in Building Their Marketing Skills: 1987 (\$35,000)

The American Farm Bureau Federation and State Farm Bureaus in eight States investigated adopting the Market Master Program, a comprehensive adult education curriculum that trains farm families how to develop financial management and marketing skills. The bureaus are located in Arkansas, Indiana, Iowa, Louisiana, Michigan, Minnesota, Ohio, and Texas. Supplements were used to teach Illinois farmers how to make effective use of their PIK certificates. More than 2,000 copies of the Market Master workbooks were distributed.

Massachusetts

Berkshire Produce Map: 1989 (\$1,995)

A 1987 map of southern Berkshire County which identified farm stands and listed product availability, hours of operation, and season, proved so popular that the project was expanded to cover the central and northern

parts of the county. About 5,000 maps were printed for the 1990 season. Increased sales attributable to the map totaled more than \$10,000 -- a return of about \$200 per participating retail operator.

Western Massachusetts Food Industry Association: 1989 (\$8,800)

The program is designed to strengthen the specialty food industry in western Massachusetts. The Western Massachusetts Food Industry Association (WMFIA) membership includes 70 producers, 30 associated business people, and 300 food industry related businesses. The group publishes a quarterly newsletter and a popular products directory. The directory increases exposure of WMFIA member products to buyers and brokers. WMFIA also developed a mailing list of food buyers and brokers in the New England area.

Integrated Pest Management Certification: 1990 (\$24,475); 1991 (\$25,475)

Integrated Pest Management (IPM) was widely accepted by Massachusetts farmers because of its cost-savings and the need to minimize the use of pesticides. IPM standards, which will be incorporated into a guide for growers, were developed for cranberries, sweet corn, apples, potatoes, and strawberries. In addition, a generic standard will be developed for other commodities. The program will develop a marketing strategy to educate consumers and produce a report on how other States can develop, implement, and promote a "Certified IPM Produce" program.

Green Industry Council Research and Training: 1990 (\$20,000)

In a tight economy, education is typically one of the first cuts to a small business' budget. The grant enabled the Green Industry Council to present seven workshops, conferences, and training sessions to help professionals comply with new industry regulations. The sessions, attended by more than 400 individuals, focused on new pesticide record-keeping requirements; public drinking water supply regulations; solid waste recycling; Endangered Species Act; and Federally mandated Commercial Drivers License.

The council also compiled statistical information on the industry to develop marketing strategies and identify potential economic growth. Marketing plans include the development of Integrated Pest Management programs for nursery, landscape ornamentals, shade trees, and turf; organic products and services; and, a directory of green industry companies.

Missouri

Missouri Alternatives Center: 1988 (\$40,000); 1989 (\$35,000)

The Missouri Alternatives Center was established to provide information on alternative enterprises for producers interested in shifting from traditional production. The center proved so popular that it was moved

to larger facilities at the University of Missouri. In the first 6 months of 1990, center staff received 746 calls on 1,712 different topics. It has become a source of information on alternative enterprises for many people, including the State Extension Service.

New Jersey

Development of an Information Clearinghouse for the Organic Produce Market: 1991 (\$58,500)

The value of organic produce sold in New Jersey is estimated at \$1 million to \$3 million. While organics is a growth area, there are numerous marketing information problems. Growers do not know where to sell organic produce. Consumers, retailers, and wholesalers do not know where to buy organic produce. The purpose of the program is to develop general marketing information: a New Jersey organic directory, consumer educational materials, and production planning services.

North Dakota

Ethanol Marketing: 1989 (\$34,400)

Through public education, this project promoted the benefits of ethanol fuel in an effort to lower consumer resistance to its use. Three brochures have been developed, including *Why is Ethanol the Premium Choice?*, *Straight Talk for Farmers on Ethanol*, and a general informational brochure on the American Coalition for Ethanol.

Ethanol Information and Education Program: 1991 (\$70,000)

Six projects will be conducted in the three-State region to present the facts about ethanol and its importance to the community. The program will include: (1) A community education program; (2) a mechanic and car dealer education program; (3) a school education program; (4) a teacher workshop; (5) opinion polls and surveys of consumers; and (6) an information clearinghouse.

Oregon

Fruit and Vegetable Availability Calendar: 1989 (\$20,000)

A wall calendar using artist renderings of Oregon fruits and vegetables was prepared to depict the availability of produce throughout the year. The illustrations were printed in various colors, according to availability by month. As the project match, a seafood availability calendar was also printed.

Evaluating Agronomic Materials of the Organic Foods Industry: 1991 (\$80,000)

The organics industry needs a materials evaluation system to provide a reasonable tool for regulators to enforce State and Federal organic laws, as well as offer clear direction to the industry itself. The program will create a computer-aided decision making system for information about organic horticultural materials and guide in their selection. Through work with various groups and the scientific community, policies will be developed for the general acceptance of an evaluation system.

PennsylvaniaEUSAFEC Export Seminar Program: 1991 (\$26,000)

The program will assist the Eastern U.S. Agriculture and Food Export Council (EUSAFEC) seminar program to help small firms understand the export market. EUSAFEC, comprised of 10 northeastern States, has conducted seminars for potential exporters in the region for small firms with less than \$3 million in sales and no international experience.

South DakotaDetermine the Organization, Program Responsibilities, and Staffing Requirements for the Department's Marketing Program: 1991 (\$7,500)

South Dakota's farmers and ranchers are among the Nation's leaders in agricultural production. However, there is a lack of an efficient marketing system for premium quality agricultural goods. The program will hire a consultant to evaluate existing programs and determine marketing opportunities for other commodities.

Virgin IslandsAgricultural Marketing Program for the U.S. Virgin Islands: 1990 (\$60,383)

Existing marketing practices in the Virgin Islands will be compared with successful techniques being used in other areas such as the High Impact Agricultural Marketing Program in the East Caribbean Islands. The program will study current marketing practices, consumer preferences, and institutional requirements. A marketing program will be developed.

WashingtonConsumer Market Research on the Safety of Fresh Fruits: 1990 (\$80,000)

Consumer research using focus group interview techniques will be used in three major metropolitan areas to explore consumer attitudes and perceptions on food safety with apples, pears, cherries, peaches, and berries. Guidelines to create an educational program will be developed.

Market News

Florida

Computer Dissemination of Market News Information: 1985 (\$19,250)

A computer network was established to provide market news to county extension offices. The pilot project provided information on one commodity. A continuation project will expand the market report to include a broader array of commodities.

Computer-Aided Marketing of Produce: 1985 (\$102,000)

Computer-Aided Marketing of Produce (CAMP) was developed after lengthy research to study the feasibility for computerized marketing in the produce industry. CAMP began marketing components to the produce industry in 1985, 1 year after it was formed. Several firms used parts of the system, but none actually traded produce during the testing period. Traders benefitted from the project by receiving information to assist in their decision making.

Voice Messaging System for Market News: 1989 (\$50,000); 1991 (\$45,000)

A Digitalized Voice Messaging System (DVMS) was developed to provide agricultural market news by phone. During the test period in 1990, callers retrieved market information on watermelon prices and supplies. In January 1991, the program received 371 calls. The program will be expanded to include other commodities. Calls will be monitored to gather information on the types of news accessed and types of callers.

Kansas

A Pilot Project for Reporting Kansas Livestock Auctions: 1989 (\$15,000)

A pilot market news project focusing on the Pratt Auction Market, with additional prices supplied from Syracuse and Junction City, reported prices from other State markets with sales in excess of 100,000 head per year. According to the study, stronger price levels exist, as much as \$1.00 to \$1.50 per cwt, where auctions are reported. Other benefits of the project include the attraction of new buyers and traders, sustained local volume, and improved quality of local cattle. During the pilot project, there was little evidence of a usual fall price decline.

Development of Program Model for Hay and Grain Market News: 1990 (\$25,000); 1991 (\$30,000)

Access to current and reliable pricing, demand, location, quality, and condition information is needed by the hay and wheat industries. This program, which was subsequently expanded, studied the need for an ongoing grain market news program and accumulated data for funding a cooperative program by the respective Kansas Commodity Commissions. The program developed a price discovery system which provided a more representative picture of the hay production base that

included brome and fescue. There was a significant impact in the first 3 months of operation, demonstrating a need for the improved and expanded reporting system.

Development of Market News Program for Direct Trade Hogs in Kansas: 1991 (\$20,000)

A survey showed that producers received 50 cents less than the national average and 90 cents less than Nebraska price/per cwt. The Kansas pork industry attributes the problem to the current market reporting system. The program will hire a contract reporter at the Dodge City Agricultural Marketing Service office, hire contract auction reporters, and develop strategies to disseminate the market news information.

North Dakota

Timely Information And Marketing of Sunflower Seeds: 1985 (\$67,400); 1986 (\$40,000)

A 1984 grant in cooperation with the National Sunflower Association helped to develop a market information program for growers. Timely market information was disseminated by newsletters, *The Sunflower* magazine, and a daily telephone market report. Sunflower growers responded enthusiastically to the telephone service. The daily market recording averaged 100 calls a day. The report cited new and old crop prices and Chicago oil and meal prices. The 1986 project established toll-free lines to facilitate handling the calls.

Rhode Island

Develop a Statewide, Centralized Market Communication Network and To Establish Inner-City Farmers' Markets: 1990 (\$36,000)

A centralized marketing communications network was developed and tested to enhance the retail sales of local roadside stands. The network linked producers and large volume consumers through a weekly market bulletin identifying locations of surplus produce. The program will also establish inner-city farmers' markets to provide reasonably priced fruits and vegetables to low-income residents, filling a void caused by the lack of supermarkets.

South Carolina

Clemson Predictive U.S. Peach Report: 1986 (\$12,500)

A model for predicting peach supplies and weekly shipment patterns, along with a weekly industry report analyzing the production and marketing situation, was developed.

Texas

Evaluation of Collection and Dissemination Alternatives for Texas Rough Rice Market News: 1988 (\$50,000)

Texas rice producers needed to receive timely market news when a major cooperative went private. This study reviewed several options for receiving marketing information: telephone tape, newsletter, or computer bulletin board system.

Marketing Feasibility Studies

DELMARVA Region: Delaware, Maryland, and Virginia

DELMARVA Produce - From Shore to Store: 1989 (\$16,934);
1991 (\$39,969)

This project developed a directory listing the availability of produce by type and zip code to increase local produce sold in local food stores. Some buyers (produce managers) have been very pleased with the program. The second phase will explore the feasibility of making the program self-sufficient and increase the amount of locally produced products in roadside stands and direct market outlets.

Mid-Atlantic Region: Maryland, West Virginia, Pennsylvania, Virginia

Expanding Farmer Access to Local Markets in the Mid-Atlantic Region: 1989 (\$70,000); 1991 (\$30,000)

The proposal had three major outputs: (1) Publication of a directory of buyers in the Baltimore/Washington area; (2) publication of a marketing guide for use by farmers wishing to enter the retail market; and (3) coordination of workshops in the four-State region.

California

Bringing the Food Marketing Chain to the Farmer: 1990 (\$75,000)

A 21-member task force in Sonoma County found that farmers lack the knowledge and techniques to collaboratively market their products through an umbrella organization for local and regional markets. The program provided technical education and training to producers on local and regional agricultural product marketing, distribution, value-added processing, alternative uses, and new product development. By researching potential markets and opportunities, the program will develop and coordinate joint marketing efforts in the county. Already, a wide variety of producers and retailers are participating in the program and a regional chain has added "Sonoma Select" products to its stores.

Colorado

Marketing Organic Fresh Produce in Colorado Supermarkets: 1990 (\$33,000)

Colorado's high altitude and short growing season is a natural area for organic production. The cold climate assists in pest control. In spite of the high expectations for market growth following the alar scare, the market has gone flat. The project plans to investigate what happened to the organic market.

Connecticut

Connecticut Specialty Food Association: 1990 (\$45,000)

A data base on specialty food producers in the State will be created. In addition, the association will be canvassed to determine the need for training and marketing assistance in solving problems unique to small food processors. An education program on the needs of small firms will be developed for financial institutions.

Iowa

Iowa Marketing Development Program: 1985 (\$73,468)

This project was supported for two reasons: (1) A Post-Harvest Handling and Market Facility Feasibility Study, and (2) a Farmers' Market Development Program. A private contractor determined that a post-harvest handling facility for melons could be successful at Wapello, Iowa. Studies by Iowa State University identified production and marketing requirements for fruits and vegetables. The State Department of Agriculture also conducted an extensive survey of farmers to determine interest in expansion of direct marketing of fruits and vegetables. The project has resulted in the identification and development of a \$25 million horticultural industry in only 5 years. The State legislature has increased support for horticulture at both the University and the State Department of Agriculture.

Maine

Potato Study for Food Service Industry: 1986 (\$150,000)

Consumer attitudes and preferences for different types of potatoes were examined to provide Maine suppliers with information to penetrate the food service market. The study focused on structure, organization, potato usage, and channels of distribution. According to one survey, Ontario, a prevalent tablestock variety, had significantly poorer ratings by consumers than other varieties. Production of the Ontario variety has declined significantly since the study was released. The study also indicated that:

- Merchandising and consumer education are needed to clarify the unique characteristics of Delta Gold, a yellow flesh variety.
- For microwave baking, round white potatoes should be no smaller than 2 inches and could run as large as 2-3¼ inches or more.
- Although consumers do not consider round whites for serving to company, they buy them for everyday use because of the texture and flavor.
- Acceptable Russet sizes ranged between 4 ounces to 5-3¼ ounces.
- An in-store test of residue tested potatoes showed that consumers who are concerned about residues would spend 6 cents a pound extra for residue testing. The majority of consumers continue to select the traditional untested round whites.

Improve the Competitiveness of Maine's Food Producers and Processors Through Centralization and Value-Adding: 1990 (\$96,000)

Food processing firms and the potato industry are researching ways to increase the use of locally produced agricultural products. Unless it can work with the processing firms, the fresh pack Maine potato industry is threatened with the loss of 20 percent of its crop. The industries researched a processed potato product that will use No. 2 grade potatoes, survive shipment, and pass shelf-life requirements. Distributors, restaurants, and institutions were surveyed on their interest in and price characteristics of samples of fresh peeled/cut potato products. Based on general responses, the current and potential demand warrants further development efforts of the potato products. A

development project and consumer survey were undertaken with value-added Maine salmon products. The program is also helping food processing firms develop a central purchasing, processing, and distribution system. In April 1991, a packaging show was held by the Maine Food Processors Association. The association represents more than 300 food processing firms that accounted for sales of approximately \$900 million in 1987.

Massachusetts

Coastal Growers Association: 1991 (\$46,668)

The Coastal Growers Association (CGA), organized in 1990, is a cooperative marketing enterprise serving the farmers of southeastern Massachusetts and Rhode Island. CGA requested program monies to study its regional production potential and develop information on food buying trends.

Michigan

Improve and Expand the Federal-State Inspection of Fresh Fruit, Vegetables, and Other Products in Michigan: 1991 (\$13,500)

A growing number of growers, shippers, processors, and consumers experienced problems with the State Fruit and Vegetable Inspection Service. The users were concerned with inconsistent charges, attrition of highly qualified inspectors, availability of inspectors, and accounting procedures. The program would evaluate the operation and finances of the inspection service in comparison with services in three similar States.

Mississippi

Fruits and Vegetable Marketing and Training Program Including Management Controls for Vegetable Packing Sheds: 1991 (\$85,000)

The State developed several vegetable packing sheds to consolidate and market local fruit and vegetable production for out-of-State processors and distributors. Primary attention focused on developing the sheds without regard to marketing and operations. As a result, operations at the sheds experienced management problems and excessive costs, and buyers rejected produce after inspections at the receiving point. The program would establish a fruit and vegetable marketing and inspection program that would also serve as a training program for farmers. In addition, the program would improve the management operation at three of the sheds.

Nebraska

Model for Exporting Identity Preserved Corn to Niche Markets: 1991 (\$40,356)

This project would assess the potential for increasing exports of high quality corn from the Midwest to Mexico and encourage sales of corn with specific intrinsic characteristics. Nebraska has the highest percentage (65.2 percent) of No. 1 grade corn in the United States, according to a USDA Federal Grain Inspection Service survey. The model would determine the niche demand for corn for Mexican food processing and livestock industries and document steps needed by locally owned elevators to meet the exporting demands.

New Jersey	<p><u>Jersey Fresh Quality Grading Program: 1985 (\$44,323)</u></p> <p>The Jersey Fresh Program, which grades locally grown produce for quality and uniformity, had a slow start with only 16 participants from the initial registry of 33 farmers. The start-up program involved training graders and dividing the State into inspection regions. In the first year (1985 season), 105,000 containers bore the Jersey Fresh logo. The program has grown to be well recognized and a model for other States.</p>
North Dakota	<p><u>Northern Plains Organic Crops Marketing Analysis: 1991 (\$41,720)</u></p> <p>Recent increases in demand for organically grown produce have resulted in health food store wholesalers experiencing problems in obtaining a timely, dependable supply of organically raised food. The program would document major domestic and international markets for organically raised wheat, sunflower, and oats, the top three commodities in the Northern Plains in 1988.</p>
Oregon	<p><u>Fresh Marketing Northwest Blueberries in California: 1991 (\$40,000)</u></p> <p>To date, there has been no unified activity to target fresh blueberries grown in Oregon and Washington for the California market. During the past 5 years, the two States have doubled their production, growing more than 16 million pounds of blueberries. The program would analyze the current use, market dynamics, and trends of fresh blueberries in California. A consumer study suggests that an opportunity exists to capitalize on point-of-purchase displays and informational materials. The program would also develop educational materials, handling and packing information, and recipes to promote Northwest blueberries.</p>
Tennessee	<p><u>An Economic Analysis of the Impact of State Logo-Stickers on Consumer Purchases of Fresh Fruits and Vegetables: 1990 (\$30,000)</u></p> <p>Shoppers are interested in locally grown produce, but will not shift stores specifically for the produce, according to a study of the Pick Tennessee Products (PTP) in four supermarkets. The analysis determined the impact of PTP logo sticker on sales. According to the study, integrating the local produce into a display can have a positive effect on sales. The most effective place to reach shoppers is the produce department with point-of-purchase displays that identify origin. Fourteen locally grown fruits and vegetables were studied. However, because consistency of supply was a problem, four items were dropped from the test.</p>
Virginia	<p><u>The Assessment of Non-Commercial Establishments for Fresh Fruits and Vegetables--The Case of the Virginia Public System: 1987 (\$48,000)</u></p> <p>What do buyers look for when purchasing State-grown fruits and vegetables for noncommercial establishments such as prisons and schools? According to this study, buyers indicated they were willing to</p>

purchase local produce if the products meet their expectations as far as: (1) Availability of products; (2) price; (3) quality as related to customer's needs; and (4) a perception of risk. Suppliers also needed to identify entry barriers and opportunities that exist in the procurement systems for institutions.

Washington

The Impacts of Developing an Irradiation Facility for Washington Agricultural Exports: 1985 (\$75,000)

A feasibility study of an irradiation facility in Washington concluded that sufficient individual quantities of apples, sweet cherries, potatoes, onions, and asparagus are grown in the State to support a large, efficient irradiation facility. However, since only a portion of each commodity would benefit from irradiation, several or all of the commodities evaluated would need to be processed so that the irradiator would be economically viable. Irradiation would cost between 12 and 41 cents per box, depending on the size of the facility. The lower cost is based on a large (240 megarad tons/month), year-round facility.

West Virginia

The Demand for West Virginia Agricultural Products in the Marketplace: 1991 (\$17,240)

This program will attempt to identify the market and buyer of four State products -- apples, honey, maple syrup, and Christmas trees. West Virginia apple production has averaged 234 million pounds. There is evidence that the apples are being shipped to saturated markets, commanding low prices. The three other commodities are also facing problems of low prices and unknown markets. The Federal-State Marketing Improvement Program, the first ever for West Virginia, will determine what marketing options are open and how producers can gain access to established markets.

Electronic-Video-Computer Marketing Studies

New Jersey

Development, Implementation, and Evaluation of Computer Sales, Transaction, Payment, and Receipts at Landisville Fruit Growers Cooperative Association: 1989 (\$23,850); 1991 (\$8,000)

A computer system was installed in January 1990 at the cooperative to record, analyze, and disseminate auction transaction information on sales, payments, and receipts for members and buyers. The system operated concurrently with previous manual methods to allow operators and the Board of Managers to build confidence with the computer. The project was extended 1 year to allow the Board of Managers additional time to analyze the benefits of the computer system and provide recommendations on additional equipment and software needs.

Oklahoma

Development of Electronic Livestock Foreign (ELF) Marketing Systems for U.S. Purebred Livestock and Related Genetic Material: 1986 (\$65,000); 1987 (\$75,000)

Barriers to the export of purebred livestock and genetic material were identified in order to develop alternative marketing systems. Basic components of this project were to conceptualize an electronic market for international marketing of genetic material, to develop research output which would provide firms with a clear understanding of the relevant markets, and to work with interested parties in the private sector to facilitate efforts to form a market. The project contributed in those areas, but an electronic marketing system has not yet been developed.

Electronic Marketing of Grain: 1985 (\$80,578)

A companion to a Virginia project, this study focused on grain marketing west of the Mississippi. After considerable development work, the two States joined forces to provide a demonstration program for the industry. The program released publications on *Attitudes of Grain Producers and Elevator Managers Toward Electronic Marketing of Grain and Transportation Services*, and *Defining Potential Adopters in a Grain Electronic Marketing System*.

Virginia

Electronic Marketing of Grain: 1985 (\$96,128)

A simulation model for computerized trading of grain was developed, tested, and shown to several organizations. Considerable interest was expressed in developing a public trading system. The program also produced a publication, *Potential for Computerized Trading of Grains in the United States*, and a report describing electronic marketing systems for several commodities by other States.

Export Marketing Studies

Maine

Export Program for Potatoes: 1985 (\$32,000)

This study examined the export potential for Maine seed potatoes in Venezuela, Jamaica, and Iraq. Foreign markets are accessible, but the process is long and involved as importers must learn the customs and methods peculiar to each area. The Maine Potato Export Board determined that the best approach is for one person or company to place a bid, and if successful, provide opportunity for other interested parties. A long-term association helps to garner confidence and the trust of foreign importers.

Nebraska

International Marketing Study for Beef Breeding Cattle and Swine: 1989 (\$56,000)

A potential market exists for swine exports to Venezuela, according to a study of foreign markets for U.S. beef and swine breeding stock. The program studied trade potential with Mexico, Argentina, Venezuela, and Australia. Preliminary results indicate that Venezuela would be receptive to hog imports when its economy improves. The swine industry is recovering from a drastic reduction in swine population brought on by low hog prices and high feed grain costs.

If negotiations are successful for a free-trade agreement between Mexico and the United States, it appears that opportunities for sales of beef and swine breeding stock into Mexico will increase. A guide was developed on exporting to Mexico. There are also tentative plans for a swine production seminar in Mexico City that will be co-sponsored with the U.S. Feed Grains Council. The program initially planned to study the market potential of Argentina. Researchers met with local buyers at the Palermo Livestock Exposition in August 1990. After initial research, the program changed its emphasis to Australia which offered more possibilities for U.S. livestock.

New York

Import Competition in the Northeast: 1986 (\$50,000)

This project was designed to assess the impact of import competition on the Northeast. According to a report comparing 1978 to 1983, the regional produce has been losing ground to imports. The project will look at fruits and vegetables that are imported in direct competition with production in the region. Six major regional markets will be studied: Baltimore/Washington, Buffalo, Boston, New York, Philadelphia, and Pittsburgh.

Direct Marketing

Colorado

Processing Plant Analysis and Direct Marketing Assistance: 1985 (\$30,000)

Feasibility studies were conducted for four firms: a sunflower processor, boxed beef packer, steak sauce processor, and a winery. The program also funded a series of meetings to identify concerns of direct marketers and enlist State help. A new publication, *The Colorado Farm Fresh Directory*, listed producers by county, products, and type of marketing operation. It is one of the most popular publications produced by the Colorado Department of Agriculture.

Idaho

Domestic Marketing Projects: 1988 (\$59,200)

This proposal has three parts: (1) A focus on the in-State production and marketing potential for import substitution through farmers' markets, pick-your-own fruit and vegetable operations, and roadside stands; (2) a focus on developing technical training and information for local producers on diversified agricultural income sources including rural development; and (3) an expansion of the specialty foods and beverage industry.

A chart on Idaho Produce Availability and a Direct Marketing Guide for Idaho have been developed. A publication, *How to Establish Your Own Farmers' Market*, is available and 13 farmers' markets have been established. Educational workshops on crop and livestock diversification were held and the Idaho Department of Agriculture worked with 75 producers on alternative crops. A 3-day workshop on "Developing Farm and Ranch Recreation" was attended by 40 farmers and ranchers. It was followed by Extension Bulletin No. 699 on future directions in the industry. Specialty foods have become one of the fastest segments of the food processing industry in the State. A non-profit trade association is in its third year and conducted three conferences. The model farmers' market and specialty foods activities programs have both been targeted for continuing funding by the Idaho Department of Agriculture.

Markets

Alabama

Impact of a Marketing and Educational Strategy on the Montgomery State Farmers' Market: 1990 (\$65,000)

The program will study why the small farmer and low-income consumer do not participate in the State Farmers' Market. One area under consideration is transportation. Several options will be explored, including the use of public and community organizations and/or churches to provide transportation. Prices and quality of the produce at the market will be compared with outside vendors.

Arkansas

Improve Operations for Great River Road Produce Cooperative: 1990 (\$78,000)

The Great River Road Produce Cooperative was severely hurt in 1990 when weather wreaked havoc with production. Members had committed to produce 1,000 acres of vegetables. The program will study if it is economically feasible to split the sales activities from the shed operation. Currently, the cooperative provides packing, grading, cooling, storage, and shipping services to producers.

Florida

Developing a Long-Range Study for Improvement and Development of the Bureau of State Farmers' Markets: 1990 (\$75,000)

A long-range market plan will be developed for the Bureau of State Farmers' Markets. The bureau is comprised of 14 farmers' markets and two livestock markets which were formed in the 1930's. The plan will project how Florida's agribusiness will change over the next 20 years and the implications for the existing markets. Population expansion, limitation or relocation of agricultural production areas, environmental regulation, and water quality and supply are areas that will be studied.

Indiana

Wholesale/Retail Market Development -- Indianapolis: 1988 (\$60,000)

While this project originally planned to look at the feasibility of creating a network of markets throughout the State, the emphasis has been changed to relocating the Indianapolis Farmers' Market. The property owner reclaimed the site for a building project. The market was relocated to the State Fairgrounds, but other potential sites are being explored. During the project, there were changes in the State to form a Commission of Agriculture and leadership on the project changed.

Massachusetts

Pioneer Valley Growers Association: 1989 (\$27,000)

The program studied whether it was feasible and cost-effective to supply farm stands in the eastern part of the State with fresh produce grown in the Connecticut Valley. A number of factors suggest that selling to other roadside stands is not economical. The costs of processing vegetables through the cooperative, including the construction of a facility, are prohibitive. Follow-up cost surveys will need to be closely

monitored. Pioneer Valley Growers Association was started by eight farms that marketed vegetables in 1984 with sales of \$50,000. This cooperative has grown to 60 members with sales of more than \$3.5 million in 1989. FSMIP helped in the formation stages of the cooperative.

Springfield Center Farmers' Market: 1989 (\$19,000)

A survey of consumers, area residents, growers, and vendors support the creation of a downtown Springfield fresh food market. The survey results will be used to develop a business and marketing plan for the future market. The market would allow small, locally owned businesses to sell their products to a large regional consumer base. There was not enough interest in a farmers' market.

Worcester Farmers' Market: 1989 (\$30,000)

Because the proposed Worcester Bio-Tech Farmers' Market program was opposed by a small group of producers located in the area, money allocated for the program was redistributed to three market activities: (1) Agra-Net Systems, (2) Massachusetts Federation of Farmers' Markets, and (3) Commodities Marketing Packaging Project.

Agra-Net Systems provides marketing information to help local farmers raise and market their products. Grant money was used to facilitate the access of information -- market reports, extension information, Integrated Pest Management messages, University of Massachusetts information, and buy/sell market area -- by farmers.

The Federation of Farmers' Markets studied management, quality control, and outreach of farmers' markets in Worcester County in order to improve management and cooperative efforts between markets. Visits to the markets during the season revealed that weak management was one of the most pressing issues throughout the region. Two workshops, "Managing Small Business Vendors" and "Retailing in a Changing Market Environment," were held to assist the markets.

Deep Root Organic Growers -- Marketing and Distribution: 1990 (\$19,000)

Deep Root Organic Truck Farmers, located in four States, is a small cooperative of 25 members that has experienced rapid growth with sales in excess of \$500,000 over the past 6 years. With FSMIP funds, the cooperative was able to develop an efficient farm pick-up and delivery schedule based on truck lease agreements and backhaul potential. The market coordinator determined that the product was not getting enough visibility and identity at retail and worked to develop a logo and consumer information. A catalogue of available products was produced. Deep Root was able to be more responsive to market needs.

Nebraska

Food Processing Center: 1988 (\$53,900)

A major activity of the food processing center was to educate the producers on hydrocooling produce. A portable unit, with an informational slide tape presentation and handout, was made available for demonstrations at various fairs. The hydrocooler was a batch unit that could handle about 2,000 pounds of produce. The project helped to educate the producers on the importance of protecting produce condition in marketing. A number of small projects to develop highly processed food products were also undertaken in cooperation with entrepreneurs. Several have opened up new markets for specialty products.

New Jersey

Development, Implementation, and Evaluation of Computer Sales Transaction Data Handling Capabilities at the New Jersey Vineland Cooperative Produce Auction Association, Inc.: 1987 (\$78,200)

As one of the largest produce auctions in the United States, the Vineland Produce Auction serves as a major assembly and distribution facility for a wide variety of fruits and vegetables. The major goal of the project was to examine the feasibility of adapting a computerized data-handling facility for the recording, analyzing, and disseminating market information. The project captured 99.4 percent of all dollar sales reported by auction management in 1988; not bad for a test system that started with untrained personnel. For whatever reason, a majority of the board voted to discontinue the project before it was completed.

LIVESTOCK

Beef

Colorado

Cattle Marketing System and Marketing Strategies: 1988 (\$40,000)

This project studied the changing structure of the beef packing industry and the impact on producers and consumers. Two reports are available from the Research Institute on Livestock Pricing: *Structural Change in Livestock: Causes, Implications, Alternatives*; and *Meatpacking Competition and Pricing*. A conference was held in Dallas in 1989 to look at the impact of structural changes in the meat industry.

Kentucky

Development of Training Aids For Evaluation of Feeder Cattle by Frame, Size, and Thickness: 1987 (\$59,107)

A training video was made to illustrate and test viewers on grade scores. Feeder calves of varying sizes, breeds, and weights, but with known historical records, were obtained from farms throughout the State. The cattle were videotaped for profiles and put on a controlled feeding program and grown to slaughter size. As a training device, the video should help producers better select stock and visualize how a young calf will develop when fed out.

Massachusetts

Examine the Marketing of Locally Raised Organic Meat, Eggs, and Animal Products: 1990 (\$3,000)

The Natural Organic Farmers Association (NOFA) of Massachusetts is an organization of 500 member individuals and families. In 1990, NOFA began work on organic standards for meat, eggs, and other animal products. The purpose of this project is to educate farmers to assure that they understand the standards, feed sources, and non-traditional remedies. So far, the primary beneficiaries of the program are farmers who are getting management advice, independent organic certification, and a premium price for organically produced animal products.

Montana

Marketing Development and Beef Processing and Development Study: 1985 (\$63,800)

This project looked at ways to expand export markets for processed beef and the feasibility of establishing a beef processing facility in Montana. Yellowstone Beef Processors reopened its plant and was selling close to 30 metric tons of beef to Japan. Montana opened a new beef market and was shipping 150 head of beef a month to Japan. It had the prospect of shipping 300 head of feeder cattle a month. Finally, there have been expanded sales of value-added products to the domestic market. Two study reports, *Analysis of Foreign Market Potential for Montana Processed Beef*, and *A study of the Financial Feasibility of Operating a Beef Slaughtering House within the State of Montana*, were developed.

Nebraska

Precooked Beef and Pork for Food Service: 1988 (\$25,050)

The purpose of this project was to develop new products and/or new cuts of beef and pork for the food service industry. Performance parameters included measures of yield, cooking time, instrumental texture, taste panel palatability, and composition. Results will permit the development of beef and pork cookery fact sheets. Significant differences were shown in palatability and costs/yields for lower and less harsh cooking practices. While this increases cooking times, the benefits are very tender, juicy, and flavorful meats. Increased yields of 3 - 7 percent were experienced, depending on the type of meat cooked.

New York

Use of Ultrasound for Detecting Abnormalities in Meat Animals:

1986 (\$28,235); 1987 (\$7,209)

The results of this study are very encouraging for the potential of using ultrasound for objective image analysis. Ultrasonic scanning of the entire liver by making several passes and sequentially moving the placement of a 5.6-cm transducer indicates that a single 25-cm transducer would make an automatic process viable. This project has demonstrated that routine objective evaluation of liver and other tissue is feasible.

Evaluating Ultrasonics for Instrument Grading of Beef Carcasses:

1985 (\$66,466); 1986 (\$49,442); 1987 (\$37,743)

Ultrasonic images of rib eye and fat at the 12/13 rib on live cattle and carcasses were generated on an Aloka 210 DXII split screen real time ultrasonic scanner. Data for 38 cattle from the 1987 New York State Fair Quality Beef Carcass Class had correlations for live ultrasonic scans with carcass measures of 0.89 and 0.85 for fat thickness and rib eye area, respectively. The repeatability of the ultrasonic scanning technique was evaluated by making random order ultrasonic scans of 34 bulls in the morning and afternoon, and had repeat correlations of 0.92 and 0.91 for fat thickness and rib eye area, respectively. It demonstrated that ultrasound was an accurate method for objectively determining similar rib fat content for 40 Holstein steers of different slaughter weights. Most major beef packing plants have expressed interest in having ultrasonic instrument grading equipment developed for evaluating beef carcasses before the hide is removed in the slaughter process.

Oklahoma

Small Meat Packer Adjustments and Market Development Strategies:

1990 (\$65,000); 1991 (\$51,818)

Structural changes that have taken place in the meat packing industry raise questions about the future role for small meat packers. The project will identify market niches that do not attract larger firms, including how small processors can gain access to food service and other national and international outlets.

Texas

An Evaluation of Value Determination Systems for the U.S. Beef Industry: 1987 (\$130,000); 1988 (130,000)

Carcass fatness and muscle score had the most influence on live and carcass value (per 45.36 kg weight basis). Independent of U.S. Department of Agriculture quality grade, value was maximized when leaner cattle were closely trimmed. As cattle become fatter and lighter-muscled, the economic advantage of producing a closely trimmed product diminishes. The study provides information useful for understanding the effects of beef cattle phenotypic traits on carcass and live value and how fat trim level interacts with these traits to ultimately determine product value.

Pork

Texas

An Evaluation of Value Determination System for the U.S. Pork Industry: 1991 (\$125,000)

Signals from consumers indicate that they prefer to purchase meat products that have little or no trimmable fat. The retail industry is responding with products that are closely trimmed. As the pork industry has moved toward a leaner pork carcass, market reporting of pork primals and subprimals has not been altered. The program will investigate the economic effects of different fat trim levels and cutting styles on values of the live animal and its carcass and cuts. It will also evaluate the accuracy of current U.S. Department of Agriculture grade prediction equations to predict yield of lean cuts or muscle from pork carcasses.

Lamb and Wool

Colorado

Lamb Marketing Study - Regional Product Identity: 1985 (\$75,000)

The program studied consumer receptivity to Rocky Mountain Lamb and assessed the potential value of an identification program. The notion of promoting a limited fall run lamb as a specialty item was not well received by consumers. The brand names of Rocky Mountain Lamb and Colorado Lamb were well received. The Rocky Mountain seal could significantly help increase sales when compared to unbranded lamb or lamb from New Zealand. An in-store test demonstrated that by increasing the variety and number of cuts displayed, stores could increase lamb sales by nearly 50 percent. Information was being used by Safeway.

Development of Lamb Classification Systems To Facilitate Marketing Based on Lean Content of the Carcass: 1989 (\$100,000)

Finishing and slaughter data have been collected for 389 lambs. Additionally, boneless and bone-in retail yield data were collected for a subsample of 90 carcasses. The project also studied 530 lambs with sufficient variation in frame size, and involved feeding special diets to get them to slaughter size. Evaluation of frame size to reflect differences in expected growth rate and the live weight at which a lamb would be expected to produce a carcass with a specific thickness of external fat proved to be more effective in producing leaner lambs than by varying feed concentrate levels. The USDA Agricultural Marketing Service will consider the data in developing new standards for grades of lambs.

New Mexico

Feasibility of Operating a Small-Scale Kill Floor, Specialty Butcher Shop, and Freezer and Cold Storage in Northern New Mexico: 1991 (\$16,266)

Ganadod del Valle, a non-profit organization that promotes development in Hispanic and Native American communities in northern New Mexico, has encouraged wool production and brought back the rare Churro and Kareukul breeds. Currently lambs are hauled 120 miles to a small custom slaughter plant. Demand for organic lamb in restaurants has exceeded the ability to supply it due to logistical problems. The program would assess the feasibility of a small-scale multi-purpose kill floor, butcher shop, and cold storage and freezer facility.

Virginia

Analysis of Demand and Market Share Issues for Wool: 1987 (\$37,880)

The objective of this study was to describe, conceptualize, and analyze the changing demand for wool and wool products. Demand for wool declined during the 1960-1987 period. The shift in the early 1970's is probably due to the introduction of man-made fibers and the rapid increase in world trade in the mid-1970's. The factors that were considered to influence U.S. consumption were domestic prices,

imports, the price of polyester, U.S. price support, and Australian wool prices. The program recommended that the U.S. wool grading system needs to be reviewed for changes to better categorize and allow pricing of quality or value-related dimensions. There is a need for closer coordination with mills to deliver the kinds and qualities of wool sought and to encourage the market promotion of wool to upscale consumers. There is also a need to maintain the wool incentive program to keep the industry from shrinking further.

Analysis of Demand and Market Share Issues for Lamb and Mutton:
1987 (\$39,870)

Demand for lamb from 1970 to 1987 appears to have been quite inelastic. There is limited evidence of declines in demand in the early 1980's that could have been related to shifts in preference patterns. None of the traditional economic forces -- income and prices of potential substitutes -- appeared to have significant influence on demand during the period. Variation in per capita consumption are explained primarily by variations in lamb prices and time-related measures. The declines in the demand for lamb have clearly compounded the industry's problems and have accentuated the trend toward a contracted industry. Any attempt to formulate a strategy must deal with the need to reverse the trend in demand. Efforts are needed in trimming, packaging, convenience preparation, and portion sizing to more nearly align fresh lamb with consumer wishes. Research, education, and promotion programs, along with guarantees of product availability to retailers wishing to run promotions, are needed to penetrate existing markets.

Market Guidelines for Direct Marketing Lambs: 1989 (\$39,546)

A survey of producers and selected market participants was conducted to update a publication that will assist producers interested in direct marketing lambs and wool. The publication will address identifying customers and customer preferences, organizing a marketing operation, advertising, and management.

Developing a Carcass-Level Value Index From Retail Lamb Prices:
1991 (\$31,429)

Changes in the industry structure and related operating environment have raised doubts about the adequacy and quality of currently available information on carcass lamb, boxed lamb, and slaughter prices. A new approach is needed to help ensure the effectiveness and efficiency of the price discovery process in lambs. The program will study how lamb carcasses are valued, and how those values relate to retail, carcass, and live-animal values.

Wyoming

Software Development for Image Analyzer for Objective Wool Measurement: 1989 (\$30,000)

The majority of the software development has been completed and is ready for American Society for Testing and Materials approval. Work is proceeding to make the grading even faster and more efficient. The current software is four times faster than the traditional method.

Use of the Pelt Puller to Improve Dressing Efficiency and Sanitation in Ram and Wether Lambs: 1989 (\$23,122)

Sixty-four white faced rams and wethers were dressed with the aid of a commercial pelt puller. The effects of age, gender, and season on difficulty of pelt removal and pelt damage were evaluated. A greater force was required to remove pelts from rams than wethers in both 5- and 12-month-old groups. Older lambs slaughtered in the fall required more force, but the seasonal difference did not exist for 5-month-old lambs. Factors involved in difficulty of pelt removal in ram lambs included crosscut shoulder weight, fat firmness, and carcass weight. Difficulty in wether lambs was best predicted by including crosscut shoulder weight and body wall thickness.

Aquaculture

Idaho

U.S. Trout Marketing Project: 1989 (\$60,000)

According to a market survey of 100 wholesalers and distributors and 58 retailers, it appears that considerable marketing work needs to be done to keep trout from remaining just another fish in the eyes of middlemen. This project contained three components: (1) Design and implement a market survey to determine the trout specifications preferred by distributors; (2) identify appropriate activities of State and Federal regulatory agencies and create a pilot trout inspection and certification program; and (3) disseminate all information and findings to the U.S. trout industry. The State is also proceeding with development of an inspection program.

Massachusetts

Aquaculture Promotion - Trout: 1988 (\$15,000).

A market research and development program was conducted to analyze need, demand, and acceptance of aquaculture, and to develop consumer education programs. The program looked at the potential for establishing a market for farm produced trout, a fee fishing operation, and whether additional species of fish would help to develop the market. It included survey data on consumer consumption and attitudes about trout and fish in general, along with discussion of market competition.

Mississippi

Development of the Mississippi Crayfish Industry: 1987 (\$30,000)

The project involved two major activities: (1) A market/consumer analysis which comprised two focus group interviews in New York City; and (2) product development/market demonstration, including a review and design of packaging for market acceptance, in the Mid-Atlantic region and New York City. There appeared to be considerable interest in the softshell crayfish at the demonstration, but the focus group interviews suggest that there is still considerable work to be done to introduce the product to New York consumers in comparison with shrimp and lobster.

South Carolina

Developing Markets for Aquaculture Products from South Carolina and the Southeastern United States: 1990 (\$41,500)

The study developed market information to assist in the expansion and diversification of new aquaculture products -- primarily hybrid striped bass -- from Southeastern United States. Information was also collected on markets for catfish, tilapia, and hard clams in the eastern, midwestern, and western regions of the United States and in Western Europe.

Two factors -- price and supply -- stood out above all others as those needed to encourage wholesalers in the United States to handle hybrid striped bass which could be a substitute for sea bass, a high value fish in Europe. It was stated many times that the price of the hybrid will need

to decrease and supply will need to become more consistent and predictable. The study found that there is not much market potential for tilapia. It had a bad reputation due to taste and quality problems.

Catfish had good potential in all of the markets studied. The study predicts that the new European Community (EC) should continue to be a good market for U.S. exports. Several important changing food consumption and market trends in EC will increase the demand for seafood. The trends include increased per capita consumption of fish and seafood, increasing disposable incomes, and a demand for convenience foods.

Wyoming

Market Analysis of the Domestic and International Tilapia, Salmon, Hybrid Striped Bass, and Freshwater Shellfish Industries and the State of Wyoming's Potential Role in Those Industries: 1990 (\$16,754)

The study is divided into four parts:

- Provide an overview of the fisheries industry, a summary of world production, and an analysis of barriers to entry with a focus on Wyoming.
- Develop production and processing economics for Wyoming, and determine costs of production in small open multipass systems, large open multipass systems, small closed systems, and large closed systems. Costs for tilapia production ranged from \$0.76/lb in large open multipass systems to \$2.09/lb in small closed systems. Costs for other species are also included.
- Analyze the current and potential usage of tilapia in major hotel and restaurant chains and show light usage at the present time.
- Develop a regional market analysis of current and potential demand for the designated species.

SPECIFIC CROPS/PRODUCTS

General

Arizona

Market Development Program for Alternative Crops Including Herbs, Spices, and Specialty Vegetables: 1991 (\$40,000)

A growing U.S. penchant for products made with fresh herbs and spices in both the food industry and food service sector has provided an opportunity for larger domestic growers. The market traditionally has been held by off-shore facilities in foreign countries and smaller domestic growers. The program will analyze local and regional marketing potential for herbs, spices, specialty vegetables, and other alternative crops. Technical education, training, and direct assistance on marketing will be provided to local growers.

Guam

Guam Orchids as Carry-on Gifts -- Targeting the Japanese Tourist Market: 1990 (\$23,425)

The purpose of the program is to survey current production and marketing of ornamentals on Guam, conduct research into the Japanese preferences for orchids, develop the phytosanitary procedures and permits required, and investigate the orchid market in Japan, Southeast Asia, and Hawaii. A special emphasis will be on prices and margins.

Idaho

Marketing Assistance for Rapeseed Grown in the Pacific Northwest: 1986 (\$40,000)

The project established rapeseed production districts within the State to separate production of edible and industrial rapeseed. University of Idaho released several bulletins reporting on winter and spring rapeseed production. These bulletins, available through the State Extension Service, discuss recommendations on varietal selection, cultural practices, pests, diseases, weed control, harvesting, and storage. Also, laboratory techniques were developed to conduct chemical analysis of rapeseeds.

Improving the Packaging of Dry Peas and Lentils in the United States: 1987 (\$70,000)

Traditionally peas and lentils have been packaged in plastic bags and lie on a low shelf in the supermarket. This research developed alternative packaging concepts and tested consumer reaction to the packaging in a nonstore environment. The selected package looks like a quart milk carton and provides better opportunities for adding nutrition information and recipes. It will be up to individual packaging firms to make the change.

Iowa	<p><u>Feasibility of Producing and Marketing Day Neutral Strawberries in the Midwest: 1987 (\$16,000)</u></p> <p>The day neutral strawberry is a new type of strawberry that is different in fruiting habit. It produces continuously from early summer to fall frost. However, high temperatures affect fruit size which results in nonmarketable berries during the summer months. Acceptance by the retail and food service industry was excellent.</p>
Louisiana	<p><u>Determine the Potential for a Pine Straw Industry: 1989 (\$20,000)</u></p> <p>This project is developing and assisting the establishment of a pine straw industry in Louisiana. The industry began with two individuals who produced about 6,000 bales a year. As of June 1991, there were 12 balers producing about 50,000 bales. The State has an abundant supply of high quality pine straw. It is reported that in some areas, owners with well-managed longleaf/slash pine forests can receive \$150 to \$200 per acre for a 6-month lease for the right to harvest pine straw. Pine straw bales sell for \$2.75 to \$4.00, depending on the quality. To assist the industry, an association has been formed and educational materials -- three publications and a video -- have been developed.</p>
Massachusetts	<p><u>Cider Development: 1990 (\$3,750)</u></p> <p>More than 2 million gallons of cider is produced annually in Massachusetts by 84 independent facilities. Over half of the producers have indicated a need for marketing help. A first-ever conference was attended by over 150 cider producers from Canada, the Northeast, and Mid-Atlantic region. Plans are underway for a second conference. A goal of the program is to develop improved cider products and consumer awareness of the value of fresh consistent cider in season.</p>
North Carolina	<p><u>National Study on Consumer Awareness and Attitudes Towards Peanuts and Peanut Products and Development of White Papers to Educate Consumers: 1990 (\$11,000)</u></p> <p>Peanuts and peanut products received a relatively low level of awareness as healthy snack foods, according to a consumer survey of American attitudes of the product. The survey of 1,014 Americans was conducted to determine attitudes, concerns, users, and develop baseline data health issues. Responses were mixed regarding attitudes towards peanuts. A series of white papers is being developed based on survey responses to suggest direction for the Peanut Council.</p> <p><u>Identifying Important Factors that Influence Consumer Purchases of Nursery Products: 1991 (\$30,543)</u></p> <p>Preliminary research by the North Carolina State University, in conjunction with the State Association of Nurseryman, indicated the need for an expanded study of key factors that influence consumer decisions to purchase plant material. The program will determine consumer satisfaction with current products and services and recommend specific changes to improve market planning.</p>

Oklahoma

Marketing Institution Improvement Programs For Oklahoma Fruits and Vegetables: 1988 (\$80,000)

The program studied factors responsible for the success and/or failure of direct and indirect fruit and vegetable marketing. Direct marketing is favored although it is time-consuming, according to the growers and buyers surveyed. Thirty-five percent of producers have been in production 5 years or less. Reasons for production include hobby, supplemental income, and use of nitrates from catfish ponds. A market window analysis has been completed for six of Oklahoma's main crops: bell peppers, broccoli, cantaloupes, cauliflower, sweet potatoes, and watermelons. Publications produced by the project include: *Problem Identification of the Oklahoma Produce Industry: The Marketing Challenge; Changing Market Institutions and Trends in Food Consumption; Marketing and Purchasing Oklahoma Fruits and Vegetables*; and several fact sheets and articles.

South Carolina

Development, Implementation, and Analysis of Maturity and Quality Standards for Southeastern Peaches: 1986 (\$20,245)

This is a continuation of a project started in 1984 to test the use of reference color chips by pickers. It was found that pickers could match the correct color 48 percent of the time and be within one color reference in 94 percent of the observations. The ground color reference standards were perceived to have worked well.

Virginia

Evaluation and Adaptation of Belgian Endive as an Alternative Crop for Virginia: 1989 (\$45,000); 1990 (\$65,089)

Even though production of endive roots for forcing is simple and relatively inexpensive, storage and forcing require careful control of temperature and relative humidity to produce chicons that can compete with European markets. In the study, chicons that were forced in hydroponic were equal to imports for quality and tasted milder than imported chicons that had aged in transit. Belgian endive, which was tested as an alternative crop for small scale farmers, was grown at three different locations in Virginia under differing soil and temperature conditions.

Washington

Determining the Market Potential for Distillers Dried Grains With Solubles Products: 1987 (\$60,000)

The study shows that it is possible to produce satisfactory commercial bread by the sponge and dough method with up to 10 percent distillers dried grains (DDGS), provided increased amounts of vital gluten are added and compensation is made for the increase in water absorption. However, adding 15 percent DDGS somewhat decreased loaf volume and opened the crumb grain. Japanese sponge cake is extremely sensitive to minor modifications in formulation and both DDGS and wheat bran affected the quality of the cakes adversely.

Cotton

Mississippi

Cotton Telecommunication Network: 1984-85 (\$150,000)

The Cotton Telecommunication Network is a computer-to-computer communication system serving the needs of the cotton industry. The network allows information to be easily exchanged between computers anywhere in the Cotton Belt and beyond. It is comprised of three main features: an electronic mail system, an information retrieval capability, and a communication link with USDA Agricultural Stabilization and Conservation Service.

Texas

Pricing on Fiber Properties and Cotton Marketing Analysis: 1985 (\$35,000)

A quantitative model was developed to show the relationship between measurable cotton fiber properties and measurable yarn properties. The model would make it possible to establish a price structure that will accurately reflect variations in fiber properties. The estimation of market values to fiber properties for producers experienced problems, but a model was eventually developed for a specific mill operation.

Marketing on Cotton Spinning Qualities: 1986 (\$40,000)

The program proved that yarn properties can be predicted from fiber properties although there is still room for improvement in measurement techniques and statistical tools. The data is still not in a form to be useful to mills. An analysis of the methods of spinning anticipated in a particular mill is needed. Additional factors have to be considered in the analysis equation to reduce unexplained variance to limits acceptable for a production environment.

Marketing on Cotton Fiber Properties and Spinning Qualities: 1988 (\$75,000)

The primary objective of this research is to reduce marketing costs by: (1) Developing a cost minimization model based on fiber characteristics that could be used by textile mills to control the feed of raw cotton; and (2) determining both the fiber characteristics that textile mills value most for different spinning applications and current factors used by mills in their purchases of raw cotton. The model has a number of shortcomings, but nevertheless performs well. It has been used to derive a set of spinning values and an estimate of the value of the Shirley FMT test. Current market prices contain built-in institutional distortions. It was recommended that the economic optimization approach to determining spinning values could prove useful in developing future pricing structures for cotton fiber as it relates to production values rather than market prices.

Market Reporting for HVI Grading: 1988 (\$42,925); 1989 (\$47,320); 1990 (\$24,974); 1991 (\$40,000)

A joint project is underway with Texas Tech and the Agricultural Marketing Service Cotton Division Market News Branch to develop a system to identify and report cotton prices and quality premiums and discounts under the HVI grading system. Development and testing of models and identification of data needs and sources have been completed. Preliminary results indicate that the model approach and the quotations derived from it can be used to aid market reporting. The model provides estimates of premiums and discounts for a larger number of fiber properties, adjusted for the effects of other fiber properties on prices, and in a manner which can be replicated and checked. Refinements in system selection and adaptation of the system to other markets remain to be done.

Juice and Wine

Arkansas

Developing Market Strategies and Manufacturing and Test Marketing New Juice and Juice Blends From Arkansas Table Grapes:
1989 (\$47,445); 1990 (\$60,000)

This project demonstrated that a good juice can be made from table grapes that are not No. 1's, but are not suitable as wine grapes. All of the juice (16,000 gallons) produced in 1989 was sold through a local food chain. In 1990, 12,171 gallons of juice were processed. The best recommended product was a blend using Venus table grapes in a 50/50 mix with apple juice. A 60/40 percent blend of grape juice to apple juice won a "Best of Show" award in a 1991 competition with 25 other juices in Florida. The 100 percent grape juice received a silver medal. Research techniques were refined in preparation for sensory evaluation of OTGGAI's *Ozark Natural* 100 percent grape juice and grape/apple blend in comparison with two national brands. The project is studying the feasibility of establishing a juice processing facility.

Alternative Market Opportunities for Blueberries from the Ozark Region: 1991 (\$40,000)

The Arkansas Blueberry Growers Association faces a portion of the marketing season each year when the price received for commercial fresh blueberries is below the break-even cost for the small family farmer. Because of the drop in price for fresh fruit, it is estimated that as much as 20 to 25 percent of the crop in the Ozarks is not harvested. The program will develop a strong alternative market for a new or blended juice and other value-added products.

Michigan

Develop Juice From Tart Cherries: 1989 (\$60,000); 1990 (\$45,000)

The U.S. tart cherry industry is facing increased competition from Eastern Europe with cherry concentrate from dark red Morello varieties. The domestic industry is based on one cultivar - Montmorency. The appeal of tart cherry products is attributed to a large extent to their brilliant red color which comes from the presence of anthocyanin pigments. Red dye is frequently added to tart cherry products to enhance and preserve the color. Other tart cherry selections are more highly pigmented. Work is being done to look at the stability of anthocyanin, other cultivars, juice charm, and sensory evaluation.

Develop Market Alternatives for Michigan Purple Plums:
1991 (\$40,000)

The program would explore the development of plum juice and plum paste as alternative markets for purple plums. Some work has already been completed to develop a plum juice, but after a few months it turned from a clear pale red color to an unappealing cloudy rusty

brown. With new technology, it is believed that this problem can be overcome and that the juice by itself, or blended with other fruit juices, could increase the market for the State's plum growers.

Texas

Texas Wine Domestic Marketing Improvement Program:

1988 (\$50,000); 1990 (\$60,000)

Texas wines were rated either good or excellent by more than 75 percent of the respondents of a survey of 3,700 wine enthusiasts. The survey received a response rate of 25.2 percent. The top six wines were Cabernet Sauvignon, Chardonnay, Merlot, Zinfandel, Sauvignon Blanc, and Pinot Noir. This project developed a profile of the typical Texas wine consumer. Wine consumption is most frequent in restaurants and least frequent in lounges and clubs. As part of the program, a wine resource information center was established at Texas Tech. Follow-up projects tested three types of in-store displays for wine, determined consumers information needs and attitudes about Texas wines, conducted a Texas Wine Symposium, and studied economic factors related to a generic promotion program.

Hay

Alaska

Alaska Hay Market Information System: 1987 (\$15,000)

Hay marketing in Alaska includes additional challenges because of the vast distances and communication difficulties in trying to bring buyers and sellers together. Under the Alaska Hay Market Information System, sellers fill out a request form at the State Extension Service. The form is sent electronically through the University of Alaska computer network to the State Division of Agriculture where the information is compiled as a printed report and sent to all persons who have expressed interest in purchasing hay. Buyers contact sellers directly and appreciate having a comprehensive list of contacts available to consider.

Indiana

Improve the Marketing of Hay with Near-Infrared Reflectance Spectroscopy: 1986 (\$30,000)

Three collective hay market groups were formed to test marketing programs based on Near-Infrared Reflectance (NIR). Two major seed companies adopted NIR as a service to their forage seed customers. The companies planned regular auctions for "tested hay only" at two sites. Indiana Dairy Herd Improvement Association contracted to do NIR testing for its members. The State Forage Council is aggressively pursuing markets for quality tested hay. Its membership increased 43 percent in 2 1/2 years. Quality hay/forage out-of-State marketings increased an estimated 50 percent.

Kentucky

Market Potential for Alfalfa in the Central and Southeastern United States: 1986 (\$58,478)

A number of University of Kentucky reports look at various aspects of alfalfa hay marketing, including market potential for alfalfa in Kentucky, availability of transportation, costs and policy related issues, and alternative marketing channels for Kentucky hay. Kentucky Pride Hay Growers Association was formed by the State Department of Agriculture to be a coordinating body for multi-county hay marketing cooperatives.

Evaluating the Marketing Effects From the Kentucky Graded Hay Program: 1989 (\$26,744)

Prices for high quality tested hay commanded substantially higher prices and larger contracts from out-of-State buyers than untested hay. Prices for the higher grades ranged from \$150 to \$87 while prices for untested hay ranged from \$85 to \$70. "Kentucky Pride," high-quality dairy hay that contains a minimum of 14 percent crude protein and has a relative feed value of 124, had the greatest positive effect on the testing and grading program. Dairy producers are prime prospects for high-quality tested hay with buyers outside the State contracting for substantial quantities. Ninety five percent of out-of-State purchasers of "Kentucky Pride" hay indicate they would not have purchased the hay without the test results.

Wyoming

Rocky Mountain Regional Hay Evaluation and Listing Program: 1988 (\$16,090)

In September 1988, a hay evaluation and listing workshop was conducted at Riverton, Wyoming, to train regional representatives in the development of a standardized basis to evaluate and list hay products. The program also provided information to improve exposure and marketability of hay products to new markets and reduce producer marketing costs. Colorado, Idaho, Montana, and Utah participated in the program. Despite not winning the State competition, a Wyoming producer scored highest in a national dairy hay evaluation competition for hay quality.

ALTERNATIVE ENTERPRISES

General

Colorado

Processing Plant Analysis and Direct Marketing Assistance: 1985 (\$30,000)

More effective promotion and advertising is needed to reach consumers, according to individuals involved in farmers' markets. They requested the State Department of Agriculture provide promotional expertise and assist in establishing a newsletter. As a result, the *Colorado Farm Fresh Directory*, listing some 160 producers by county, products, and type of operation, was prepared and proved very popular. Feasibility studies were also conducted for the following types of processing facilities: sunflower processing, expansion of a small processor into boxed beef, steak sauce, freezing vegetables produced on the west slope, and wine grapes.

Feasibility of Producing and Marketing Crops Not Currently Grown in the Rocky Mountain Region: 1987 (\$40,000)

A report summarized the testing of the following commodities: bluecorn, mung beans, adzuki beans, black turtle beans, organic strawberries, wildrice, edible soybeans, sesame, blackberry leaves, xanthophyll marigolds, sweet potato, essential oils, and medicinals.

Connecticut

Expanding Farmer Access to Local Markets in the New England Region--Four State Proposal--New Hampshire, Vermont, Massachusetts, and Connecticut: 1991 (\$60,000)

A regional advisory committee will be formed to assist farmers in the Connecticut River Valley to tap into regional retail food stores, restaurants, specialty markets, catering businesses, schools, hospitals, and military and government institutions. While some farmers have been successful in tapping into the market, a vast majority needs added education and training. The initial focus will be on selling fresh produce to the wholesale markets, identifying potential markets within the valley, and developing marketing and educational goals. A second phase will establish a demonstration program with seminars and workshops.

Georgia

Rural to Urban Marketing Program: 1991 (\$50,000)

The Federation of Southern Cooperatives/Land Assistance Fund established a rural-urban direct marketing program with inner-city community and church groups in selected cities -- New Orleans, Atlanta, Memphis, and Birmingham in the South; and Chicago, St. Louis, and Philadelphia in the North. The program will hire a

marketing program coordinator to establish regular marketing and distribution channels so that the direct marketing program can become self-sufficient. It also will attempt to convince farmers to raise vegetable crops rather than grain.

Idaho

Domestic Marketing Projects: 1988 (\$59,200)

This project had three parts: (1) direct marketing; (2) crop and livestock diversification; and (3) expansion of Idaho's specialty foods and beverages industry. Six day-long marketing courses for farmers and ranchers were taught throughout Idaho. The course agenda included a marketing plan, a community development project, four presentations by agricultural marketers, and a group-marketing project. The program also helped initiate several farmers' markets after an institutional survey was conducted. More than 40 farmers and ranchers participated in a conference on attracting tourists through farm and ranch recreational activities. Conference topics included regulations, insurance and risk, business and market plan development, promotion, and resource requirements. A trade association of specialty food producers and a wine program were formed.

Kansas

Market Potential Swine and Fiber: 1988 (\$50,000)

Two feasibility studies were undertaken on the market potential for the swine and fiber industries in Kansas. The swine report concluded that Kansas has a number of factors favoring the expansion of the swine industry, such as closeness to feed supply, space for hog operations to reduce risk of disease, and availability of production specialist expertise. But a lack of financing and a reluctance of corporate investors to deal with Kansas Corporate Farm Laws may be major deterrents. The fiber study concluded that even though Kansas produces over 1.8 million pounds of wool annually, there are likely to be more attractive opportunities than pursuing a wool processing facility.

Massachusetts

Diversified Direct Marketing Development Projects: 1985 (\$50,000); 1986 (\$60,000)

Three programs were funded to assist small farmers and cooperatives. The Pioneer Valley Growers Association developed a quality control program to enhance sales to local and regional chains. The association, started in 1983, projected sales for 1985 of \$2 million. The Massachusetts Federation of Farmers' Markets hired a full-time market organizer and doubled the number of markets and participants. A Small Farms Resource Center developed information materials to assist small farmers. It had 200 participants in the first 6 months.

Fostering Entrepreneurial Agricultural Marketing: 1987 (\$40,000)

The program grant provided money for the publication of a *Green Industry Directory* of Cape Cod farms, greenhouses, nurseries, and flower growers; a brochure on the types and uses of Massachusetts Honey and Pure Beeswax products; and five new Farm Trails harvest

maps. Also developed were programs for a collective marketing association for food processing companies, organic certification standards for fruit production, and quality control for a growing produce cooperative.

Missouri

Alternative Enterprises Information Center: 1988 (\$40,000); 1989 (\$35,000)

The Alternative Enterprises Information Center has become an outstanding resource for information on almost any kind of agriculturally related alternative enterprise. Because of its success, the Center was moved to the Community Development Department of the University of Missouri. The Center, which is heavily used by farmers and extension services, provides articles for a reproduction fee. In April 1989, it received 253 calls on 418 topics. During the first 6 months of 1990, the Center received 746 requests on 1,712 alternative topics. The originator has continued to research articles pertaining to alternative enterprises.

Montana

Identification of Alternative Crop Markets: 1987 (\$55,000)

Montana State University studied 10 promising alternative crops: canola, oilseed flax, pinto beans, fababeans, triticale, edible lentils, Great Northern white beans, amaranth, safflower, buckwheat, and medic. *Montguides* on the alternative crops have been produced and distributed by the State Extension Service. The University also identified specialty crop buyers and markets for kobacha squash and burdock root. In addition, three alternative crops marketing/information groups were formed by the Montana Department of Agriculture; an electronic Agricultural Marketing Bulletin Board was installed to provide a buyer's directory of agricultural producers and value-added processors, daily grain market reports, agricultural statistics, and other information. An association was formed to market high-quality hay. The hay listing has proved worthwhile in times of drought and surpluses. A canola crusher has located a facility in the State.

Nebraska

Diversification of Nebraska's Agriculture: 1986 (\$120,100)

Thirty-nine agronomic crops and seven horticultural crops were planted in demonstration plots around the State as part of a program to investigate alternative crops, markets, and marketing techniques. A comprehensive handbook, *Alternative Crops for Nebraska*, was developed along with a data base of alternative crop producers and crop information. To help dealers understand and work with marketing requirements, a program was developed that included information on cooperative marketing.

Vegetable Growers Assistance: 1988 (\$14,835)

The Wildcat Produce Association, a small growers organization, studied the results of transplanting vegetables versus direct seeding. The group successfully planted 72 acres of vegetables despite a dry year due to

advance planning (irrigation). According to the study, onions performed best as transplants. Direct seeding efforts had poor germination. In addition, production of bell peppers, pumpkins, squash, and onions was increased in 1990.

Vermont

Agriculture and Tourism in Vermont: 1987 (\$50,000)

This project assessed Vermont white tablecloth restaurants' receptivity to State products. The restaurants, because of their specialized "upscale" nature and typically smaller volume and higher profit margins, pay more for products of higher quality. The study found a large demand for Vermont meat products, particularly veal and lamb. Most restaurants use some local products, primarily for enhanced product freshness and quality and a desire to support the local economy. Reasons for not using local products include lack of knowledge about sources of supply and problems with quantity and dependability. One barrier to providing local meat is a lack of adequate slaughter facilities.

Wholesale Processing/Industry Development Program: 1989 (\$15,000)

A feasibility study and market evaluation were completed for natural/organic livestock -- specifically poultry -- and two nonmeat processing components -- organic vegetables and field-grown cut flowers. The study indicated that free-range poultry can be profitable in Vermont on a small scale. However, the industry needs to develop a competitive processing and marketing system to be able to supply larger stores. Questions still remain about the standards for free-range and organic poultry. The study on nonmeat processing components reports that stony farm fields limit the production of vegetables for processing in northern Vermont. There was also considerable interest in producing flowers for cutting in Vermont fields. A conference was held for potential buyers. There is a great deal of enthusiasm for the program: 125 growers, with acreage ranging from small gardens to 6 acres, were eager to participate.

Transportation

**Iowa, Wisconsin,
Michigan, Illinois,
Missouri**

Upper Mississippi River Transportation Economics Study:
1985 (\$127,500)

A computer model of the upper Mississippi waterway was developed to simulate the impact of a number of efficiencies or improvements in waterway and fleet operation. Examples of efficiencies include fuel efficiency, barge connections and locking, automated locking systems, river depths and flows, and crew size.

Kansas

Intermodal Feasibility Appraisal for Delivery of Kansas Agricultural Products: 1989 (\$15,000)

Kansas exports more shipments than it imports. A potential exists for coordinating the movement of empty inbound equipment from Denver with outbound western Kansas loads. The study recommended a need to provide more information to Kansas shippers about intermodal shipping, to improve intermodal facilities at Newton and Garden City, and to investigate construction of a paper ramp to serve traffic north of I-70.

North Dakota

Northern Plains Barley Rail Market Analysis: 1989 (\$29,044)

Since 1980, many non-traditional barley markets have opened up for Northern Plains producers. New feed and malting barley markets have provided Northern Plains shippers and railroads with an opportunity for growth and increased profits. However, the producers are competing for the market with producers from Montana, Idaho, and other Mountain Region States. Most of these markets are accessible only by rail (Gulf, Pacific Southwest, and Pacific Northwest). In 1988, Northern Plains dominated rail shipments with 65.3 percent of barley rail shipments. This project evaluated the changing barley markets and changes in rail flows of barley over the past 3 years and its impact on the Northern Plains rail market.

Washington

Determining Feasibility of New Intermodal Technologies in Marketing and Transporting Washington Agricultural Products: 1988 (\$75,000)

A survey was completed of major fruit and vegetable receivers. Receivers were surveyed because traffic managers for chain buyers or brokers make the actual decisions on transportation choices. Based on the survey information, a cost-determination model was developed. Cost estimates were discussed with railroad and shipper representatives in preparation of a final report.

DIRECTORY OF FSMIP PROJECTS, BY YEAR

1985

Mississippi River	\$127,500	Upper Mississippi River Transportation Economics Study (Iowa, Wisconsin, Michigan, Illinois, and Missouri)
Colorado	\$30,000	Processing Plant Analysis and Direct Marketing Assistance
	\$75,000	Lamb Marketing Study -- Regional Product Identity
	\$30,000	Processing Plant Analysis and Direct Marketing Assistance
Florida	\$19,250	Computer Dissemination of Market News Information
	\$102,000	Computer Aided Marketing of Produce
Iowa	\$73,469	Iowa Marketing Development Program
Maine	\$32,000	Export Program for Potatoes
Massachusetts	\$50,000	Diversified Direct Marketing Development Projects
Mississippi	\$150,000	Cotton Telecommunications Network (1984-1985)
Montana	\$63,800	Marketing Development and Beef Processing and Development Study
New Jersey	\$44,323	Jersey Fresh Quality Grading Program
New York	\$66,466	Evaluating Ultrasonics for Instrument Grading of Beef Carcasses
North Dakota	\$67,400	Timely Information and Marketing of Sunflower Seeds
Oklahoma	\$80,578	Electronic Marketing of Grain
Texas	\$35,000	Pricing on Fiber Properties and Cotton Marketing Analysis
Virginia	\$96,128	Electronic Marketing of Grain
Washington	\$75,000	The Impact of Developing an Irradiation Facility on Washington Agricultural Exports

1986

Alabama	\$25,000	Farm Products Marketing Training
Colorado	\$25,500	Livestock Marketing Assistance
Idaho	\$40,000	Marketing Assistance for Rapeseed Grown in the Pacific Northwest
Indiana	\$30,000	Improve the Marketing of Hay with Near-Infrared Reflectance Spectroscopy
Kentucky	\$58,478	Market Potential for Alfalfa in Central and Southeastern United States
Maine	\$150,000	Potato Study for Food Service Industry
Massachusetts	\$60,000	Diversified Direct Marketing Development Projects
Nebraska	\$120,000	Diversification of Nebraska's Agriculture
New York	\$50,000	Import Competition in the Northeast
	\$28,235	Use of Ultrasound for Detecting Abnormalities in Meat Animals
	\$49,442	Evaluating Ultrasonics for Instrument Grading of Beef Carcasses (continuation)
North Dakota	\$40,000	Timely Information and Marketing of Sunflower Seeds (continuation)

Oklahoma	\$65,000	Development of Electronic Livestock Foreign Marketing Systems for U.S. Purebred Livestock and Related Genetic Material
South Carolina	\$12,500	Clemson Predictive U.S. Peach Report
	\$20,245	Development, Implementation, and Analysis of Maturity and Quality Standards for Southeastern Peaches
Texas	\$40,000	Marketing on Cotton Spinning Qualities
1987		
Alaska	\$15,000	Alaska Hay Market Information System
Colorado	\$40,000	Feasibility of Producing and Marketing Crops Not Currently Grown in the Rocky Mountain Region
Idaho	\$70,000	Improving the Packaging of Dry Peas and Lentils in the United States
Illinois	\$35,000	Development of a Handbook To Assist Farm Families in Building Their Marketing Skills
Iowa	\$16,000	Feasibility of Producing and Marketing Day Neutral Strawberries in the Midwest
Kentucky	\$59,107	Development of Training Aids for Evaluation of Feeder Cattle by Frame, Size and Thickness
Massachusetts	\$40,000	Fostering Entrepreneurial Agricultural Marketing
Mississippi	\$30,000	Development of the Mississippi Crayfish Industry
Montana	\$55,000	Identification of Alternative Crop Markets
New Jersey	\$78,000	Development, Implementation, and Evaluation of Computer Sales Transaction Data Handling Capabilities at the New Jersey Vineland Cooperative Produce Auction Association
New York	\$7,209	Use of Ultrasound for Detecting Abnormalities in Meat Animals (continuation)
	\$37,743	Evaluating Ultrasonics for Instrument Grading of Beef Carcasses (continuation)
Oklahoma	\$75,000	Development of Electronic Livestock Foreign Marketing Systems for U.S. Purebred Livestock and Related Genetic Material (Phase II)
Texas	\$130,000	An Evaluation of Value Determination Systems for the U.S. Beef Industry
Vermont	\$50,000	Agriculture and Tourism in Vermont
Virginia	\$48,000	The Assessment of Non-Commercial Establishments for Fresh Fruits and Vegetables -- The Case of the Virginia Public System
	\$37,880	Analysis of Demand and Market Share Issues for Wool
	\$39,870	Analysis of Demand and Market Share Issues for Lamb and Mutton
Washington	\$60,000	Determining the Market Potential for Distillers Dried Grains With Solubles Products

1988

Colorado	\$40,000	Cattle Marketing System and Marketing Strategies
Idaho	\$59,200	Domestic Marketing Projects
	\$59,200	Domestic Marketing Projects
Indiana	\$60,000	Wholesale/Retail Market Development -- Indianapolis
Kansas	\$50,000	Market Potential Swine and Fiber
Massachusetts	\$15,000	Aquaculture Promotion -- Trout
Missouri	\$40,000	Missouri Alternatives Center
	\$40,000	Alternative Enterprises Information Center
Nebraska	\$53,900	Food Processing Center
	\$25,050	Precooked Beef and Pork for Food Service
	\$14,835	Vegetable Growers Assistance
Oklahoma	\$80,000	Marketing Institution Improvement Programs for Oklahoma Fruits and Vegetables
Texas	\$50,000	Evaluation of Collection and Dissemination Alternatives for Texas Rough Rice Market News
	\$130,000	An Evaluation of Value Determination Systems for the U.S. Beef Industry
	\$75,000	Marketing on Cotton Fiber Properties and Spinning Qualities
	\$42,925	Market Reporting for HVI Grading
	\$50,000	Texas Wine Domestic Marketing Improvement Program
Washington	\$75,000	Determining Feasibility of New Intermodal Technologies in Marketing and Transporting Washington Agricultural Products
Wyoming	\$16,090	Rocky Mountain Regional Hay Evaluation and Listing Program

1989

DELMARVA	\$16,934	Delaware/Maryland/Virginia Produce -- From Shore to Store
Mid-Atlantic	\$70,000	Expanding Farmers Access to Local Markets in the Mid-Atlantic Region (Maryland, West Virginia, Pennsylvania, and Virginia)
Alabama	\$30,000	To Establish, Operate, and Evaluate a Pilot Program in Consumer Education
Arkansas	\$47,445	Developing Market Strategies and Manufacturing and Test Marketing New Juice and Juice Blends from Arkansas Grapes
Colorado	\$100,000	Development of Lamb Classification Systems To Facilitate Marketing Based on Lean Content of the Carcass
Florida	\$50,000	Voice Messaging System for Market News
Idaho	\$60,000	U.S. Trout Marketing Project
Kansas	\$15,000	A Pilot Project for Reporting Kansas Livestock Auctions
	\$15,000	Intermodal Feasibility Appraisal for Delivery of Kansas Agricultural Products
Kentucky	\$26,744	Evaluating the Marketing Effects From the Kentucky Graded Hay Program
Louisiana	\$20,000	Determine the Potential for a Pine Straw Industry

Massachusetts	\$1,995	Berkshire Produce Map
	\$8,800	Western Massachusetts Food Industry Association
	\$27,000	Pioneer Valley Growers Association
	\$19,000	Springfield Center Farmers' Market
	\$30,000	Worcester Farmers' Market
Michigan	\$60,000	Develop Juice from Tart Cherries
Missouri	\$35,000	Missouri Alternatives Center (continuation)
	\$35,000	Alternative Enterprises Information Center (continuation)
Nebraska	\$56,000	International Marketing Study for Beef Breeding Cattle and Swine
New Jersey	\$23,850	Development, Implementation, and Evaluation of Computer Sales, Transaction, Payment, and Receipts at Landisville Fruit Growers Cooperative Association
North Dakota	\$34,400	Ethanol Marketing
	\$29,044	Northern Plains Barley Rail Market Analysis
Oregon	\$20,000	Fruit and Vegetable Availability Calendar
Texas	\$47,320	Market Reporting for HVI Grading (continuation)
	\$60,000	Texas Wine Domestic Marketing Improvement Program
Vermont	\$15,000	Wholesale Processing/Industry Development Program
Virginia	\$39,546	Market Guidelines for Direct Marketing Lamb
	\$45,000	Evaluation and Adaptation of Belgian Endive as an Alternative Crop for Virginia
Wyoming	\$30,000	Software Development for Image Analyzer for Objective Wool Measurements
	\$23,122	Use of the Pelt Puller To Improve Dressing Efficiency and Sanitation in Ram and Wether Lambs
1990		
Alabama	\$65,000	Impact of a Marketing and Educational Strategy on the Montgomery State Farmers' Market
Arkansas	\$78,000	Improve Operations for Great River Road Produce Cooperative
	\$60,000	Developing Market Strategies and Manufacturing and Test Marketing New Juice and Juice Blends from Arkansas Grapes (continuation)
California	\$75,000	Bringing the Food Marketing Chain to the Farmer
Colorado	\$33,000	Marketing Organic Fresh Produce in Colorado Supermarkets
Connecticut	\$45,000	Connecticut Specialty Food Association
Florida	\$75,000	Developing a Long-Range Study for Improvement and Development of the Bureau of State Farmers' Markets
Guam	\$23,425	Guam Orchids as Carry-On Gifts -- Targeting the Japanese Tourist Market
Kansas	\$25,000	Development of Program Model for Hay and Grain Market News

Massachusetts	\$24,475	Integrated Pest Management Certification
	\$20,000	Green Industry Council Research and Training
	\$19,000	Deep Root Organic Growers: Marketing and Distribution
	\$3,000	Examine the Marketing of Locally Raised Organic Meat, Eggs, and Animal Products
	\$3,750	Cider Development
Maine	\$96,000	Improve the Competitiveness of Maine's Food Producers and Processors Through Centralization and Value-Adding
Michigan	\$45,000	Develop Juice from Tart Cherries (continuation)
North Carolina	\$11,000	National Study on Consumer Awareness and Attitudes Towards Peanuts and Peanut Products and Development of White Papers To Educate Consumers
Oklahoma	\$65,000	Small Meat Packer Adjustments and Market Development Strategies
Rhode Island	\$36,000	Develop a Statewide, Centralized Market Communication Network and To Establish Inner-City Farmers' Markets
South Carolina	\$41,500	Developing Markets for Aquaculture Products from South Carolina and the Southeastern United States
Tennessee	\$30,000	An Economic Analysis of the Impact of State Logo-Stickers on Consumer Purchases of Fresh Fruits and Vegetables
Texas	\$24,974	Market Reporting for HVI Grading (continuation)
Virginia	\$65,089	Evaluation and Adaptation of Belgian Endive as an Alternative Crop for Virginia (continuation)
Virgin Islands	\$60,383	Agricultural Marketing Program for the U.S. Virgin Islands
Washington	\$80,000	Consumer Market Research on the Safety of Fresh Fruit
Wyoming	\$16,754	Market Analysis of the Domestic and International Tilapia, Salmon, Hybrid Striped Bass, and Freshwater Shellfish Industries and the State of Wyoming's Potential Role in Those Industries

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Arizona	\$40,000	Market Development Program for Alternative Crops Including Herbs, Spices, and Specialty Vegetables
Arkansas	\$40,000	Alternative Market Opportunities for Blueberries from the Ozark Region
Connecticut	\$60,000	Expanding Farmer Access to Local Markets in the New England Region -- Four-State Proposal -- New Hampshire, Vermont, Massachusetts, and Connecticut
Delaware	\$39,969	DELMARVA Produce Shore to Shore
Florida	\$45,000	Voice Market Information System for AMS Market News
Georgia	\$50,000	Rural to Urban Marketing Program
Kansas	\$20,000	Development of Market News Program for Direct Trade Hogs in Kansas
	\$30,000	Development of Program Model for Hay and Grain Market News (continuation)

Maryland	\$30,000	Expanding Farmer Access to Local Markets in the Mid-Atlantic Region -- Phase II
Massachusetts	\$46,668	Coastal Growers Association
	\$25,475	Marketing Development for "Certified Integrated Pest Management Produce."
Michigan	\$40,000	Develop Market Alternatives for Michigan Purple Plums
	\$13,500	Improve and Expand the Federal-State Inspection of Fresh Fruit, Vegetables, and Other Products in Michigan
Mississippi	\$85,000	Fruits and Vegetable Marketing and Training Program
Nebraska	\$40,356	Including Management Controls for Vegetable Packing Sheds
New Jersey	\$8,000	Model for Exporting Identity Preserved Corn to Niche Markets
		Development, Implementation, and Evaluation of Computer Sales, Transaction, Payment, and Receipts at Landisville Fruit Growers Cooperative Association
	\$58,500	Development of an Information Clearinghouse for the Organic Produce Market
New Mexico	\$16,266	Feasibility of Operating a Small Scale Kill Floor, Specialty Butcher Shop, and Freezer and Cold Storage in Northern New Mexico
North Carolina	\$30,543	Identifying Important Factors That Influence Consumer Purchases of Nursery Products
North Dakota	\$41,720	Northern Plains Organic Crops Marketing Analysis
	\$70,000	Ethanol Information and Education Program
Oklahoma	\$51,818	Small Meat Packer Adjustments and Market Development Strategies Project -- Phase II
Oregon	\$80,000	Evaluating Agronomic Materials of the Organic Foods Industry.
	\$40,000	Fresh Marketing Northwest Blueberries in California
Pennsylvania	\$26,000	EUSAFEC Export Seminar Program
South Dakota	\$7,500	Determine the Organization, Program Responsibilities, and Staffing Requirements for the Department's Marketing Program
Texas	\$125,000	An Evaluation of Value Determination System for the U.S. Pork Industry
	\$40,000	Pricing Analysis for HVI Market Reporting
Virginia	\$31,429	Developing a Carcass-Level Value Index From Retail Lamb Prices
West Virginia	\$17,240	The Demand for West Virginia Agricultural Products in the Marketplace

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